SECTION A: 40 MARKS

Answer **all** questions in this Section

Questions **1** to **20** carry two marks each

1. Simplify: $13 + 14 - 12$

2. Workout: $^{-}8 + {}^{+}5$

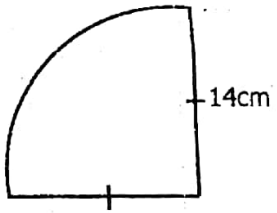
3. Given that Set **D** = {q, e, i, w} and Set **K** = {a, e, i, o, u}. How many elements make up the union of **D** and **K**?

Convert 34 millimetres to centimetres.

5. Solve: $14 - 2p = 4$

6. Mubende Public School will play a football match with Kyegegwa Junior School. What is the probability that Mubende Public School will win?

7. Workout the perimeter of the figure below. (Use π as $\frac{22}{7}$)

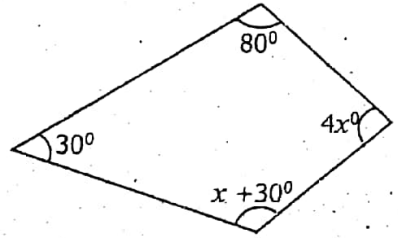


8. By selling a phone jacket at Sh.7,000, a trader realizes a profit of Sh.2,000. Calculate his percentage profit.

9. Workout: $1\ 1\ 0_{two} \times 1\ 1_{two}$

10. In a stationary shop, Sh.5,000 can buy 3 books. How much money can buy 9 books?

11. Find the value of x in the figure below.

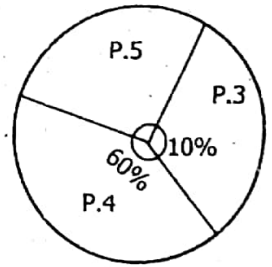


12. Find the median of $\frac{1}{3}$, $\frac{1}{8}$, $\frac{1}{4}$ and $\frac{1}{3}$.

13. A woman was born in 46BC and died in 21AD. How old was at the time of her death?

14. A tailor bought 10.5 metres of cloth. She cut the cloth into small pieces of cloths $1\frac{1}{2}$ metres each. How many small pieces of cloths did she cut out?

15. The Pie-Chart below shows the number of pupils in P.3, P.4 and P.5 at Trinity Primary School.



If P.4 and P.5 have 360 pupils altogether, how many pupils are in P.3?

16. Simplify: $\frac{4^3 \times 4^4}{4^5}$

17. In what ratio must 32 mangoes be reduced to 28 mangoes?

18. Without carrying out actual division, prove that 553 is exactly divisible by 7.

19. David uses 48 minutes to ride from his home to the workplace which is at a distance of 32 kilometres. Calculate in Km/h the speed at which he rides.

20. Workout the cube root of 216.

SECTION B: 60 MARKS

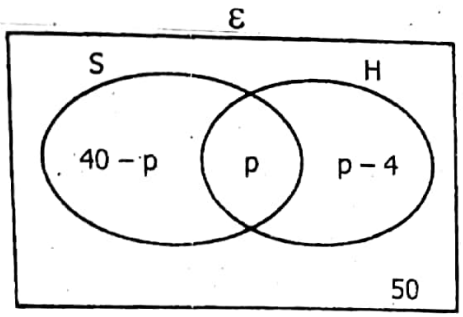
Answer **all** questions in this section

Marks for each question are indicated in brackets.

21. (a) Use distributive property to workout: $(137 \div 8) - (9 \div 8)$ (02 Marks)

(b) Find the sum of $\left(4 \times \frac{1}{10}\right)$ and $\left(9 \times \frac{1}{10}\right)$ (03 Marks)

2. At Little Lijos Kindergarten, pupils play skipping (S), Hide and Seek (H) and other games as shown in the Venn diagram. The number of pupils playing Hide and Seek is as much as those playing other games.



Find the number of pupils in the school. (04 Marks)

23. The average weight of 11 football players is 70kg and the average weight of the players with their coach is 72kg. calculate the weight of the team coach. (04 Marks)

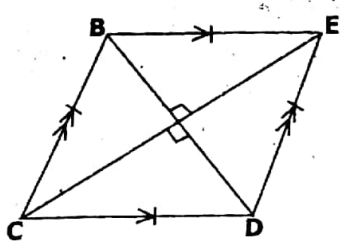
24. Company **F** pays its workers' allowances every after 14 days, while Company **G** pays the workers' allowances after 16 days.

(a) Find the minimum number of days taken by both companies to pay their workers' allowances at once. **(03 Marks)**

(b) On which day of the week do the two companies pay their workers at once? (02 Marks)

25. Tank **A** is $\frac{1}{2}$ full of water and Tank **B** is $\frac{3}{4}$ full of water. If there are 20 more litres of water in Tank **B** than **A**, find in litres the amount of water in tank **A**. (04 Marks)

26. In the figure below, diagonal **BD** = 12cm and diagonal **CE** = 16cm. The two diagonals bisect each other.



(a) Workout the area of the figure **BCDE**. (02 Marks)

(b) Calculate the perimeter of the figure above. (04 Marks)

27. The exchange rates for Kenya Shillings (Ksh) to Uganda Shillings (UgSh) and United States Dollars (US$) to Uganda Shillings are shown below.

Ksh.1 = Ugsh.34

US$ 1 = Ugsh.3,800

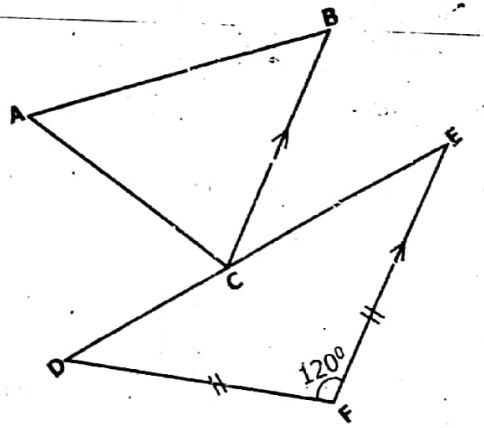
(a) How many Kenya Shillings can one get from US$ 6,800? (03 Marks)

(b) If the cost of a suitcase is US$.50, how much does it cost in Uganda Shillings? (02 Marks)

28. Rashell is thrice Joan's age while Martha is 5 years older than Joan. In four years to come, Rashell and Joan will be twice as old as Martha. How old is Rashell? (05 Marks)

Turn Over

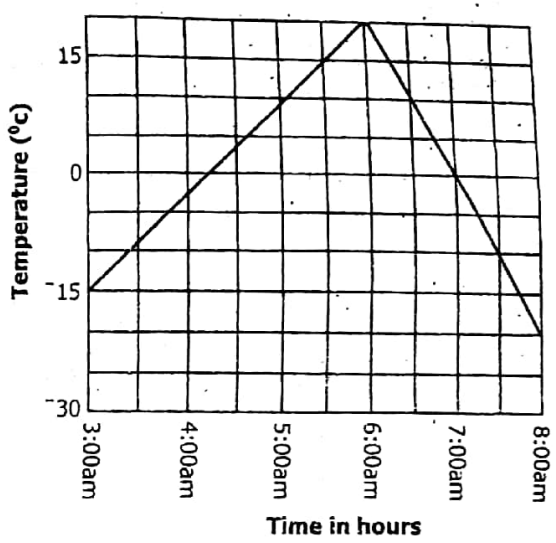
29. In the diagram below, line **BC** is parallel to **EF**. Angel **ACD** is 10^0 more than angle **ACB**. **EFD** is an Isosceles triangle.



(a) Find the size of angle **FEC**. (02 Marks)

(b) Calculate the size of the angle **ACD**. (03 Marks)

30. The graph below shows the variations in the temperatures at the top of a mountain at different time intervals of the day. Study it carefully and then answer the questions that follow.



(a) Write the scale of the graph on the vertical axis. (02 Marks)

(b) What was the maximum temperature experienced on the top of the mountain? (01 Mark)

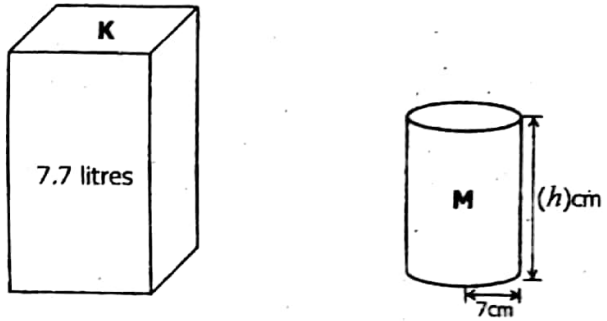
(c) At what time was the temperature 15^0c? (01 Mark)

(d) Calculate the temperature range. (02 Marks)

31. (a) Using a ruler, a pencil and a pair of compasses only, construct a triangle **BAG** where line **BA** = 6.5cm, angle **GBA** = 30^0 and angle **GAB** = 45^0. (04 Marks)

(b) Drop a perpendicular from point **G** to meet line **BA** at ***W***. (01 Mark)

32. A rectangular milk tank **K** below contains 7.7 litres of milk. All the milk is then collected in 5 small cylindrical containers **M** each of radius 7cm and unknown height (h)



Calculate the height of the small container **M**. (Use π as $\frac{22}{7}$)

(05 Marks)

END